OIPE

RAW SEQUENCE LISTING

DATE: 12/06/2001

PATENT APPLICATION: US/09/996,569

TIME: 15:04:44

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ENTERED

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3 <110> APPLICANT: Soppet et al.
      5 <120> TITLE OF INVENTION: G-Protein Parathyroid Hormone Receptor HLTDG74
      7 <130> FILE REFERENCE: PF201D1
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/996,569
C--> 10 <141> CURRENT FILING DATE: 2001-11-30
     12 <150> PRIOR APPLICATION NUMBER: 08/468,011
     13 <151> PRIOR FILING DATE: 1995-06-06
     15 <160> NUMBER OF SEQ ID NOS: 28
     17 <170> SOFTWARE: PatentIn Ver. 2.1
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     20 <211> LENGTH: 2003
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     26 <222> LOCATION: (90)..(1715)
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     32
                                        Met Ala Trp Leu Gly Ala Ser Leu
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                                                                           161
     35 cac gtc tgg ggt tgg cta atg ctc ggc agc tgc ctc ctg gcc aga gcc
     36 His Val Trp Gly Trp Leu Met Leu Gly Ser Cys Leu Leu Ala Arg Ala
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                                                                           209
     39 caq ctq qat tct qat qqc acc atc act ata qaq qaq caq att qtc ctt
     40 Gln Leu Asp Ser Asp Gly Thr Ile Thr Ile Glu Glu Gln Ile Val Leu
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     43 gtg ctg aaa gcg aaa gta caa tgt gaa ctc aac atc aca gct caa ctc
     44 Val Leu Lys Ala Lys Val Gln Cys Glu Leu Asn Ile Thr Ala Gln Leu
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     47 cag gag gga gaa ggt aat tgt ttc cct gaa tgg gat gga ctc att tgt
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     48 Gln Glu Gly Glu Gly Asn Cys Phe Pro Glu Trp Asp Gly Leu Ile Cys
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                                          65
                                                                           353
     51 tgg ccc aga gga aca gtg ggg aaa ata tcg gct gtt cca tgc cct cct
     52 Trp Pro Arg Gly Thr Val Gly Lys Ile Ser Ala Val Pro Cys Pro Pro
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     59 ccc aat gga aca tgg gat ttt atg cac agc tta aat aaa aca tgg gcc
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     68 Lys Gln Glu Phe Cys Glu Arg Leu Tyr Val Met Tyr Thr Val Gly Tyr
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| 72 | Ser | Tle | Ser | Phe | Gly | Ser | LOU | Δla | y - y V = 1 | λla | Tla | LOU | TIA | TIA | 21 | mar. | 593 |
| 73 | DCI | 110 | 155 | 1 110 | OLY | UCI | Deu | 160 | Val | ліа | TIE | пец | 165 | тте | сту | тут | |
| | ttc | aαa | | ttα | cat | tac | act | | aac | tat | ato | cac | | 020 | ++> | +++ | 641 |
| | | | | | His | | | | | | | | | | | | 041 |
| 77 | 1110 | 170 | 111 9 | Dea | 11.1.0 | Cys | 175 | пта | N311 | TÄT | 116 | 180 | Met | птъ | ьеи | Pile | |
| | ata | | ttc | atσ | ctg | aαa | | aca | agg | atc | +++ | | 222 | a = a | 2072 | at a | 689 |
| 80 | Va 1 | Ser | Phe | Met | Leu | Ara | Δla | Thr | Ser | Tla | Dha | Val | Luc | Nan | aya | y La Val | 009 |
| | 185 | 001 | | 1100 | | 190 | mu | 1 111 | DCI | 110 | 195 | vai | шуз | тэр | Arg | 200 | |
| | | cat | act. | cac | ata | | αta | ааσ | αaα | cta | | tcc | cta | ata | ata | | 737 |
| 84 | Va 1 | His | Ala | His | Ile | 554 G1v | Va1 | Lvs | G111 | Leu | Glu | Ser | T.e.ii | Tla | Mot | Cln | /3/ |
| 85 | | | | | 205 | | , | 270 | O L u | 210 | Olu | DCI | LCu | 116 | 215 | GIII | |
| | qat | qac | cca | caa | aat | t.cc | at.t. | σασ | gga | | tct | ata | σac | 222 | | caa | 785 |
| 88 | Asp | Asp | Pro | Gln | Asn | Ser | Ile | G1u | A1a | Thr | Ser | Val | Asn | Lvs | Ser | G1n | 703 |
| 89 | - | • | | 220 | | | | | 225 | | 501 | , 41 | ПОР | 230 | DCI | OIII | |
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| 92 | Tyr | Ile | Gly | Cvs | Lys | Ile | Ala | Val | Val | Met | Phe | T1e | Tvr | Phe | Len | Δla | 033 |
| 93 | - | | 235 | • | • | | | 240 | | | | | 245 | - 110 | | 1114 | |
| 95 | aca | aat | tat | tat | tgg | atc | ctq | | qaa | aat | ctc | tac | | cat. | aat | ctc | 881 |
| 96 | Thr | Asn | Tyr | Tyr | Trp | Ile | Leu | Va1 | Ğlu | G1v | Leu | Tvr | Leu | His | Asn | Leu | 001 |
| 97 | | 250 | _ | _ | - | | 255 | | | _ | | 260 | | | | | |
| 99 | atc | ttt | gtg | gct | ttc | ttt | tcg | gac | acc | aaa | tac | ctg | tgg | qqc | ttc | atc | 929 |
| 100 | Ile | Phe | val | Ala | Phe | Phe | Ser | Asp | Thr | Lys | Tyr | . Leu | Trp | Gly | Phe | e Ile | |
| | 265 | | | | | 270 | | | | | 275 | | _ | - | | 280 | |
| 103 | ttg | ata | ggc | : tgg | ggg | ttt | cca | gca | gca | ttt | gtt | gca | gca | tgg | gct | gtg | 977 |
| 104 | _ | | | | | | | | | | | | | | | | |
| | Leu | Ile | G1y | Trp | Gly | Phe | Pro | Ala | . Ala | Phe | Val | Ala | Ala | Trp | Ālā | ιVaĺ | |
| 105 | | | | | Gly 285 | | Pro | | | 290 | | Ala | Ala | Trp | Ala 295 | Val | |
| 105 107 | gca | . cga | gca | act | Gly 285 ctg | gct | Pro | gcg | agg | 290 tgc | tgg | Ala gaa | Ala ctt | Trp | Ala 295 gct | Val | 1025 |
| 105 107 108 | gca | . cga | gca | act Thr | Gly 285 ctg Leu | gct | Pro | gcg | agg Arg | 290 tgc Cys | tgg | Ala gaa | Ala ctt | Trp | Ala 295 gct | Val | 1025 |
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| 105 107 108 109 111 112 | gca Ala gac | cga Arg | gca Ala aag Lys | act Thr 300 tgg | Gly 285 ctg Leu | gct Ala | gat Asp | gcg Ala | agg Arg 305 | 290 tgc Cys | tgg Trp | Ala gaa Glu gca | Ala ctt Leu gct | agt Ser 310 | Ala 295 gct Ala | Val 5 gga Gly | |
| 105 107 108 109 111 112 113 | gca Ala gac Asp | cga Arg atc | gca Ala aag Lys 315 | act Thr 300 tgg Trp | Gly 285 ctg Leu att Ile | gct Ala tat Tyr | gat Asp caa | gcg Ala gca Ala 320 | agg Arg 305 ccg Pro | 290 tgc Cys atc | tgg Trp tta Leu | gaa Glu gca Ala | ctt Leu gct A1a 325 | agt Ser 310 att | Ala 295 gct Ala ggg | Val gga Gly ctg | |
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| 105 107 108 109 111 112 113 115 116 117 119 120 121 123 124 | gca Ala gac Asp aat Asn tgg Trp 345 ctg | cga Arg atc Ile ttt Phe 330 gag Glu | gca Ala aag Lys 315 att Ile acc Thr | act Thr 300 tgg Trp ctg Leu aat Asn | Gly 285 ctg Leu att Ile ttt Phe gca Ala aca Thr | gct Ala tat Tyr ctg Leu gtt Val 350 ctg | gat Asp caa Gln aat Asn 335 ggg Gly | gcg Ala gca Ala 320 acg Thr cat | agg Arg 305 ccg Pro gtt Val gac Asp | 290 tgc Cys atc Ile aga Arg aca Thr cta Leu | ttag Trp tta Leu gtt Val agg Arg 355 | gaa Glu gca Ala cta Leu 340 aag Lys | Ala ctt Leu gct Ala 325 gct Ala caa Gln | agt Ser 310 att Ile acc Thr tac | Ala 295 gct Ala ggg Gly aaa Lys agg Arg | y Val gga Gly Leu atc Ile aaa Lys 360 tac | 1073 1121 1169 |
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| 105 107 108 109 111 112 113 115 116 117 119 120 121 123 124 125 127 128 129 | gca Ala gac Asp aat Asn tgg Trp 345 ctg Leu atc Ile | cga Arg atc Ile ttt Phe 330 gag Glu gcc Ala gtg Val | gca Ala aag Lys 315 att Ile acc Thr aaa Lys ttc Phe | act Thr 300 tgg Trp ctg Leu aat Asn tcg Ser gtg Val 380 | att Ile ttt Phe gca Ala aca Thr 365 tgc Cys | gct Ala tat Tyr ctg Leu gtt Val 350 ctg Leu ctg Leu | gat Asp caa Gln aat Asn 335 ggg Gly gtc Val | gcg Ala 320 acg Thr cat His ctg Leu cac | agg Arg 305 ccg Pro gtt Val gac Asp gtc Val tcc Ser 385 | 290 tgc Cys atc Ile aga Arg aca Thr cta Leu 370 ttc Phe | ttgg Trp tta Leu gtt Val agg Arg 355 gtc Val act | gaa Glu gca Ala cta Leu 340 aag Lys ttt Phe | ctt Leu gct Ala 325 gct Ala caa Gln gga Gly | Trp agt Ser 310 att Ile acc Thr tac Tyr gtg Val ggg Gly 390 | Ala 295 gct Ala ggg Gly aaa Lys agg Arg cat His 375 tgg | y Val gga Gly Ctg Leu atc Ile aaa Lys 360 tac Tyr | 1073 1121 1169 1217 |
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| 159 160 | tca c Ser H | cac | | | | | agg | | | | | gat | | | | | 1649 |
| 163 | aga g | | | | | atg | | | | | agg | | | | | aac | 1697 |
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| 171 173 | cctat | tgct | tg a | tcat agcad | caaa | gg ct | gaaa | atto | agt | ttaag | gtg | ttad | ettaa | ata a | atagt | gatact tttta | 1872 |
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| 194 196 197 | Thr I | [le | G1u 35 | 20 Glu | Gln | I1e | Val | Leu 40 | 25 Va 1 | Leu | Lys | Ala | Lys 45 | 30 Va l | G1n | Cys | |
| 199 200 | Glu I | 50 | Asn | | | | 55 | Leu | | | | 60 | G1y | | | | |
| 203 | Pro 6 65 Ile S | | _ | | _ | 70 | | _ | _ | | 75 | _ | | | _ | 80 | |
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| 211 | His | Ser | | | Lys | Thr | Trp | | | Tyr | Ser | Asp | | Leu | Arg | Phe |
| 212 | | | 115 | | | | | 120 | | | | | 125 | | | |
| 214 215 | Leu | Gln 130 | Pro | Asp | Ile | Ser | Ile 135 | Gly | Lys | Gln | Glu | Phe 140 | Cys | Glu | Arg | Leu |
| | Tvr | | Met | Tvr | Thr | Va1 | | Tyr | Ser | T1e | Ser | | G1v | Ser | T.eu | Δla |
| | 145 | | | -1- | | 150 | 011 | -1- | DOI | 110 | 155 | 1 | 011 | DOI | Lou | 160 |
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| 221 | | | | | 165 | | | | | 170 | | | | | 175 | |
| 223 | Asn | Tyr | Ile | His | Met | His | Leu | Phe | Val | Ser | Phe | Met | Leu | Arg | Ala | ${	t Thr}$ |
| 224 | | | | 180 | | | | | 185 | | | | | 190 | | |
| 226 | Ser | Ile | Phe | Val | Lys | Asp | Arg | Val | Val | His | Ala | His | Ile | Gly | Val | Lys |
| 227 | | | 195 | | | | | 200 | | | | | 205 | _ | | |
| 229 | G1u | Leu | G1u | Ser | Leu | I1e | Met | Gln | Asp | Asp | Pro | G1n | Asn | Ser | Ile | G1u |
| 230 | | 210 | | | | | 215 | | - | _ | | 220 | | | | |
| 232 | Ala | Thr | Ser | Val | Asp | Lvs | Ser | Gln | Tvr | Ile | Glv | | Lvs | Ile | A1a | Val |
| | 225 | | | | 2 | 230 | | 0 | -1- | | 235 | OIB | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 110 | | 240 |
| | | Met | Phe | Tle | Tvr | | T.eu | Δla | Thr | Δen | | Tur | Trn | Ile | T.011 | |
| 236 | | | | | 245 | - 110 | 200 | 1114 | | 250 | -1- | - 1 - | 112 | 110 | 255 | , 41 |
| | Glu | Glv | T.en | Tur | | Hic | Δen | T. 2 11 | Tlo | | Va l | λla | Dha | Phe | | λen |
| 239 | Olu | OI, | БСи | 260 | пси | 1115 | ASII | пси | 265 | riic | Vai | ALG | rne | 270 | Ser | ASP |
| | Thr | Two | Пхин | | Ten | C117 | Dho | Tlo | | т1 о | C117 | m rr | C1 ** | Phe | Dro | 717 |
| 242 | 1111 | пуз | 275 | Leu | 111 | СТУ | FIIE | 280 | Leu | 116 | СТУ | тър | 285 | Pile | PIO | АІА |
| | 71. | Dho | | 71. | 71. | Пъъ | 71.0 | | 310 | 3 | 71- | ml | | . 1 - | | 21- |
| 244 | Ala | 290 | Val | ALa | Ата | ттр | | Val | Ald | Arg | Ата | | ьеu | Ala | ASP | Ата |
| | 3 | | | a 1 | T | a | 295 | a 1 | | - 1 - | • | 300 | -1- | _ | ~ 1 | - 7 |
| | | Cys | ттр | GLU | Leu | | Ата | GTÄ | Asp | тте | _ | Trp | ше | Tyr | GIN | |
| | 305 | | _ | | | 310 | - 1 | _ | | _, | 315 | _ | | | | 320 |
| | Pro | тте | Leu | Ala | | тте | СТĀ | Leu | Asn | | TTE | Leu | Phe | Leu | | Thr |
| 251 | | | | | 325 | | | _ | | 330 | | | | | 335 | |
| | Val | Arg | Val | | Ala | Thr | Lys | Ile | _ | Glu | Thr | Asn | Ala | Val | Gly | His |
| 254 | | | | 340 | | | | | 345 | | | | | 350 | | |
| | Asp | Thr | | Lys | Gln | Tyr | Arg | | Leu | Ala | Lys | Ser | Thr | Leu | Val | Leu |
| 257 | | | 355 | | | | | 360 | | | | | 365 | | | |
| 259 | Va1 | Leu | Val | Phe | Gly | Val | His | Tyr | Ile | Val | Phe | Val | Cys | Leu | Pro | His |
| 260 | | 370 | | | | | 375 | | | | | 380 | | | | |
| | | Phe | Thr | Gly | Leu | Gly | Trp | Glu | Ile | Arg | Met | His | Cys | Glu | Leu | Phe |
| | 385 | | | | | 390 | | | | | 395 | | | | | 400 |
| 265 | Phe | Asn | Ser | Phe | Gln | Gly | Phe | Phe | Val | Ser | Ile | Ile | Tyr | Cys | Tyr | Cys |
| 266 | | | | | 405 | | | | | 410 | | | | | 415 | |
| 268 | Asn | Gly | G1u | Val | Gln | A1a | G1u | Va1 | Lys | Lys | Met | Trp | Ser | Arg | Trp | Asn |
| 269 | | | | 420 | | | | | 425 | | | | | 430 | | |
| 271 | Leu | Ser | Val | Asp | Trp | Lys | Arg | Thr | Pro | Pro | Cys | Gly | Ser | Arg | Arq | Cys |
| 272 | | | 435 | _ | - | _ | - | 440 | | | _ | - | 445 | - | - | - |
| 274 | Gly | Ser | Val | Leu | Thr | Thr | Val | | His | Ser | Thr | Ser | | Gln | Ser | Gln |
| 275 | - | 450 | | | | | 455 | | - | | _ | 460 | . – | | | |
| | val | | Ala | Ala | His | Ala | | Cys | Leu | Ser | Leu | | Lvs | Leu | Pro | Ara |
| 278 | | | · | | - | 470 | -1 | 4 | | | 475 | | | | • | 480 |
| | | Pro | Ala | Asp | Ser | | Thr | Ala | Thr | Ser | | Tvr | Len | Ala | Met | |
| | | | | E | | | | | | | | -1- | | | | 201 |

RAW SEQUENCE LISTING DATE: 12/06/2001 PATENT APPLICATION: US/09/996,569 TIME: 15:04:44

Input Set : A:\PF201D2-SeqList-text.txt Output Set: N:\CRF3\12062001\1996569.raw

485

495 283 Gly Val Thr Gln Ser Arg Thr Ala Ser His Thr Leu Ser Thr Arg Ser 500 505 286 Asn Lys Glu Asp Ser Gly Arg Gln Arg Asp Asp Ile Leu Met Glu Lys 515 520 289 Pro Ser Arg Pro Met Glu Ser Asn Pro Asp Thr Glu Gly 530 535 294 <210> SEQ ID NO: 3 295 <211> LENGTH: 23 296 <212> TYPE: DNA 297 <213> ORGANISM: Artificial Sequence 299 <220> FEATURE: 300 <221> NAME/KEY: Primer_Bind 301 <223> OTHER INFORMATION: This 5' primer sequence contains a Smal restriction enzyme site followed by nucleotides corresponding to PTH receptor 303 coding sequence. 306 <400> SEQUENCE: 3 307 cagccgtccc gggcttggcc tgg 23 310 <210> SEQ ID NO: 4 311 <211> LENGTH: 27 312 <212> TYPE: DNA 313 <213> ORGANISM: Artificial Sequence 315 <220> FEATURE: 316 <221> NAME/KEY: Primer_Bind 317 <223> OTHER INFORMATION: This 3' primer sequence contains a SalI restriction 318 enzyme site and a sequence complementary to the human PTH 319 receptor. 321 <400> SEQUENCE: 4 322 cctcagtqtc gacttqtcat ccttcag 2.7 325 <210> SEQ ID NO: 5 326 <211> LENGTH: 27 327 <212> TYPE: DNA 328 <213> ORGANISM: Artificial Sequence 330 <220> FEATURE: 331 <221> NAME/KEY: Primer_Bind 332 <223> OTHER INFORMATION: This 5' primer contains a HindIII restriction enzyme site and a nucleotide sequence corresponding to the 5' UTR of the cDNA 334 encoding human PTH receptor. 336 <400> SEQUENCE: 5 337 gttggcatat tggaagcttt ttgcggg 27 340 <210> SEQ ID NO: 6 341 <211> LENGTH: 28 342 <212> TYPE: DNA 343 <213> ORGANISM: Artificial Sequence 345 <220> FEATURE: 346 <221> NAME/KEY: Primer_Bind 347 <223> OTHER INFORMATION: This 3' primer sequence contains an XbaI restriction enzyme site, a translation stop codon, and nucleotides 349 complementary to the human PTH receptor coding sequence.

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/996,569

DATE: 12/06/2001

TIME: 15:04:45

Input Set : A:\PF201D2-SeqList-text.txt
Output Set: N:\CRF3\12062001\I996569.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date